Six ways to ensure higher education leaves no one behind

Higher education is a cornerstone for sustainable development. It creates new knowledge, teaches specific skills and promotes core values like freedom, tolerance and dignity. Under the fourth Sustainable Development Goal (SDG) on inclusive and equitable quality education and lifelong learning opportunities for all, Target 4.3 states that, by 2030, countries should provide equal access for all women and men to affordable and quality technical, vocational and higher education, including university. Achieving this target will facilitate the achievement not only of SDG4 but also of all other SDGs.

The higher education sector is very diverse. In addition to wide-ranging traditional degree and advanced degree programmes, there are short courses with a career, vocational or technical focus. While the traditional face-to-face mode of delivery is still dominant, there is now an increasing number of distance and blended programmes. Within countries, higher education institutions vary widely in terms of size, cost, course offerings, procedures, traditions, governance and quality. These differences are amplified by different national policies on admission criteria and funding.

A defining characteristic of most higher education systems are the large disparities in access and completion, especially by income and wealth. In the absence of policies and programmes to support qualified students from disadvantaged backgrounds, efforts to expand higher education systems risk widening these gaps.

To make higher education a catalyst for the creation of sustainable, innovative and equitable societies, governments and universities have to develop policies to make colleges and universities both affordable and inclusive.

This policy paper, written in partnership with the UNESCO International Institute for Education Planning (IIEP), makes policy recommendations for equitable and affordable higher education to better support the implementation of the SDG agenda. To do this, it reviews recent trends in higher education expansion, identifies disparities in student participation, examines policy tools and practices for fostering equity, and explores ways to target assistance at those who need it most.

Global demand for higher education continues to increase

Worldwide, enrolment in higher education has been growing steadily. Between 2000 and 2014, the number of students in higher education institutions more than doubled, rising from 100 million to 207 million. In the same period, the global higher education gross enrolment ratio increased from 19% to 34%. This ratio expresses enrolment as a percentage of the population who are in the five-year age group immediately following secondary school graduation (typically ages 19 to 23).

The global figures obscure major differences between regions. The higher education gross enrolment ratio ranges from an average of 8% in sub-Saharan Africa to 75% in Europe and Northern America. Nonetheless, over the last two decades, higher education participation has been on the rise in less well-off regions, which is reflected in

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1. This policy paper uses ‘higher education’ in the same sense as ‘tertiary education’ is used in the International Standard Classification of Education (ISCED) 2011 manual. Higher education (ISCED levels 5 to 8) builds on secondary education, providing learning activities in specialised fields of education. It provides learning at a high level of complexity and specialisation.
the fact that since 1995, average global higher education participation rates have increased by about 4% per year.

Students in high income countries began to go to university and college at increased rates in the decades after the Second World War. But about 20 years ago, enrolment in middle income countries started to increase and has outpaced the rest; over the last 20 years, enrolment rates have risen by 7% per year in upper middle income countries and 5% in lower middle income countries. Even low income countries are picking up speed, matching the global average growth rate of 4%. By contrast, high income country participation growth has slowed to 2% a year (see Figure 1).

There are several reasons for the rise in participation rates, including increased demand, greater wealth, more supportive government policies and a growing sense of responsibility for social equity (Oketch, 2016). The main driving force has been the increase in demand for higher education from the middle classes, to which governments have responded by finding ways to support increases in participation and by building new infrastructure (UIS, 2014). Improved progression rates in primary and secondary schools are also a factor in increasing demand: As more students complete cycles of secondary education, they look to higher education to help prepare them for new careers, professions and life opportunities. Another factor is the increased participation in higher education of non-traditional students, including part-time students and working adults. Adults (aged 25+) make up more than a third of enrolled undergraduate students in 10 European countries, while in five countries at least one in four students has a part-time status (Hauschildt et al., 2015).

Middle income countries with rapid growth rates in higher education have a few things in common. Along with a growing pool of eligible students, they have a growing middle class with higher occupational aspirations and a regulatory environment that is becoming more stable. They provide funding for educational infrastructure and for salaries and development of teachers, staff and administrators (Marginson and Smolentseva, 2014).

**FIGURE 1:**
Enrolment in upper-middle income countries has grown by 7% per year in the past 20 years
Tertiary education gross enrolment ratio, by country income group, 1970-2014 (%)

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<th>Year</th>
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Source: UIS database.

**PROVIDERS ARE BECOMING MORE DIVERSE**

Higher education institutions are diversifying alongside their student bodies. Public, private, and open distance education institutions have grown in numbers, size, specialisation and mission. Instead of research programmes or other types of specialised study, many new institutions provide broad access programmes (Levy, 2013). And new kinds of private providers have emerged, in the form of international branch campuses and international online providers (Kinser et al., 2010). Private enrolments have been growing steadily. They now account for 30% of all global enrolments. In Latin America, private enrolments account for 49% of the total. In Brazil, Costa Rica, El Salvador, Honduras, Nicaragua and Peru, more than 60% of students in 2015 were enrolled in private institutions, along with more than 80% of students in Chile and Paraguay (Guzmán-Valenzuela, 2016). In Asia, private enrolments make up 36% on average, where countries such as Indonesia, Malaysia and Thailand are experiencing the same trend (Yang and McCall, 2014). Open education providers are also gaining ground. Gross enrolment rates in Turkey grew from 30% in 2004 to 86% in 2014 in part due to distance education enrolments. Over 1.7 million undergraduate students enrolled at Anadolu University in 2014, almost a third of all higher education enrolments in the country (Tekneci, 2016).
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WOMEN ARE CLOSING THE PARTICIPATION GAP…

On average, women and men attend bachelor and master’s programmes at more or less the same rates. But women still lag behind men in doctorate programmes (44%). There are big differences between countries. Men still dominate bachelor programmes by three to one in low income countries, where enrolment rates are still far below the global average: Of the 3.3 million bachelor students in low income countries in 2014, only 30% were women. In some countries, including Afghanistan, Benin, Central African Republic, Chad and Niger, fewer than 40 women were enrolled in higher education for every 100 men.

In most countries, disparity between women and men increases between entering higher education and completing it, with women more likely to graduate than men. In Costa Rica, for every 100 women in 2014, 80 men enrolled but only 55 graduated. In Caribbean countries, including Aruba, and in Northern Africa and Western Asia, including Kuwait, about three times more women than men graduated from higher education.

...BUT POOR STUDENTS, ETHNIC MINORITIES AND INDIGENOUS GROUPS LAG BEHIND

The 2016 Global Education Monitoring Report examined disparities between the richest and poorest students in terms of completion of higher education. Across 76 countries, 20% of the richest 25–29 year olds had completed at least four years of higher education, compared with less than 1% of the poorest (see Figure 2).

In the Philippines, for example, 21% of 25–29 year olds had completed at least four years of higher education in 2013, but the picture was very different depending on students’ household wealth: 52% of the richest individuals, but only 1% of the poorest, completed four years. In Mongolia, 72% of the richest completed at least four years of higher education in 2010, compared with 3% of the poorest.

There is also a large disparity according to household wealth in certain countries in Eastern Europe, including Bulgaria, the Republic of Moldova and the former Yugoslav Republic of Macedonia.

FIGURE 2:
Vast differences exist in higher attainment between the poor and the rich
Percentage of 25–29 year olds who have completed at least four years of tertiary education, by wealth, selected countries, 2008–2014

Source: GEM Report team analysis of household survey data.
A closer look at a few country examples shows that low enrolment rates persist among disadvantaged groups. For example, in South Africa, in 2013, participation rates for Africans were at 16% and for Coloureds, 14%, considerably lower than the national goal of 20%, and significantly lower when compared to rates for Whites (55%) and Indians (47%) (CHE, 2013). In Mexico, less than 1% of the indigenous population were enrolled in post-secondary education, in spite of attempts to open pathways by providing focused education to indigenous children in primary schools (UNICEF and INEE, 2016). In China, youth who live in rural areas are seven times less likely to attend university than those from urban areas (Hongbin et al., 2013).

Governments have many policy tools to foster equity

Equity policies in different countries target different groups, and use a range of strategies to do so. To create opportunities for students with more varied needs and expectations, many countries are trying to expand and diversify higher education offerings and to create multiple pathways between secondary and higher education. Legislative frameworks and monitoring bodies are key policy tools in this effort. Admission requirements can be engineered to help achieve equity objectives. And bringing higher education closer to potential beneficiaries through the creation of new higher education institutions in underserved regions has proven to be an effective strategy for greater equity in many countries (see Box 1).

A study in 15 countries in Asia and the Pacific, Europe and North America on the link between expansion and inequality in higher education (Shavit et al., 2007). The study concludes that greater inclusion can be achieved by a combination of expansion and differentiation. This is because, simply speaking, increased enrolments include more students. However, inclusion can be relative. An important question is: Increased access to what? Research conducted in several developed countries shows that students from disadvantaged backgrounds tend to concentrate in lower prestige higher education. Expansion increases competition for a limited number of high status positions, and it often leads to a process of ‘diversion’, whereby disadvantaged groups tend to enrol in lower prestige subject areas and in lower prestige institutions, such as polytechnics, community colleges and other technical colleges (Marginson, 2016).

Box 1

Equity, equality of right and equality of opportunity in higher education

Equity means being fair, and offering equal treatment where comparable conditions exist. It does not mean that there has to be precise equality of representation in all areas of higher education. The Organisation for Economic Co-operation and Development (OECD) defines equitable higher education systems as those that ensure that the only factors defining an individual’s access to, participation in, and outcomes from higher education are that individual’s innate ability and study effort. Equitable systems like this ensure that an individual’s potential for achievement at higher levels of education is not based on his or her personal and social circumstances, such as socio-economic status, gender, ethnic origin, immigrant status, place of residence, age or disability.

Perspectives on equity in accessing higher education have changed over time. In the 19th century, the norm was ‘inherited merit’, based on an individual’s particular circumstances such as gender and social class. Now, most countries have adopted either the ‘equality of right’ or ‘equality of opportunity’ approach to access in their higher education systems. ‘Equality of right’ means that everyone should be treated in the same way, independent of individual circumstances. ‘Equality of opportunity’ means that unequal treatment, such as affirmative action, is justified in order to redress severe social disadvantage attributable to past unequal treatment.

Sources: Goastellec (2010); McCowan (2016); Santiago et al. (2008).

National legislative frameworks can provide a basis for equity

Legislating for equal opportunity and against discrimination is a key strategy that governments use to foster equity and affordability in their higher education systems. However, there is great variation in the use of these measures across countries: Few countries guarantee universal access to post-secondary education, and in those that do, the level of inclusiveness differs.

Ecuador and Greece are constitutionally bound to provide free post-secondary education to all citizens, while Tunisia guarantees free public higher education through a law rather than the constitution (Law No. 19-2008). The constitutions of Brazil, Finland, the Republic of Korea and the Russian Federation guarantee access to higher education based on ability. For example, the Constitution of the Federative Republic of Brazil guarantees free education according to individual capacity (Art. 208, No. 59,
and the Constitution of the Republic of Korea states that ‘all citizens have an equal right to receive an education corresponding to their abilities’ (Art. 31(1), 1987).

Many laws and acts guaranteeing access to higher education prohibit discrimination and encourage access for minorities and disadvantaged groups. Brazil’s Law No. 10,558 promotes access to higher education for people from socially disadvantaged groups, specifically targeting Afro-descendants and indigenous peoples (Art 1, 2002). Similarly, the education framework developed by the Lao People’s Democratic Republic Ministry of Education emphasises equality of access in all of the country’s 17 provinces (Education Sector Development Framework 2009–2015 §2.4).

Legal frameworks mention the cost and affordability of higher education less often, but where they do, it can provide a useful tool for setting expectations about the balance between public investment and household spending. Kenya, Peru, the Philippines and Uganda include clauses on affordability in their constitutions and legal frameworks.

Kenya’s Higher Education Loans Board Act of 1995 increases access for socio-economically disadvantaged students by ‘grant[ing] loans out of the Fund … as the Board may deem fit, to any eligible person to enable him, or assist any student, to meet the cost of higher education’ (Chapter 213A, §6(g)). Peru’s constitution considers cost as a possible means of discrimination and guarantees the ‘right to free education’ based on performance for those who ‘lack the economic resources needed to cover the cost of education’ (1993, Article 17, Congress of the Republic).

The goal of the Philippines Higher Education Act of 1994 is to ‘protect, foster and promote the right of all citizens to affordable quality education’ (Republic Act No. 7722, §2).

STEERING AND IMPLEMENTATION CAPACITIES ARE ESSENTIAL

Legal and policy frameworks are an important first step, but they are not enough: Countries need monitoring and compliance authorities, commissions and agencies to support equity policies and ensure affordability in higher education. In countries with strong equity frameworks (for instance, Australia, Brazil, India and South Africa), quality assurance agencies also support monitoring of national equity policies, and thus create synergy between policy design and implementation (Martin, 2010). Australia, for example, requires regular statistical reporting from higher education institutions to help monitor equity efforts (Stella, 2010).

National monitoring of equity policies is particularly important when higher education institutions determine their own admission policies and manage student recruitment. Statistical reporting allows governments to compare institutions’ performance and to establish whether and to what extent progress has been made towards the achievement of national targets. However, statistics by themselves cannot offer an insider’s view on the effectiveness of institutional policies and practices in implementing higher education institutions’ equity policies. This kind of additional insight can be generated through institutional audits or regular qualitative reporting mechanisms (Martin, 2010).

Some countries use formula funding to help meet equity objectives, some of which relate public allocations to performance indicators (Salmi and Hauptmann, 2006). In South Africa, national higher education institutions receive a share of their funding on the basis of their success in enrolling historically disadvantaged black students (Lang and Singh, 2010). Disadvantaged students often need additional support to help them successfully graduate from higher education, and special incentives for institutions to recruit students from specific groups can help provide this support. Students with special needs can also be targeted through funding allocations: Governments can provide special purpose funding to higher education institutions for adapting buildings or other accommodations. For example, in 2015, Poland allocated $11.5 million for sign language interpreters and disability awareness training for faculty and students to help raise sensitivity (OECD, 2015).

DIVERSIFIED ADMISSION REQUIREMENTS CAN SUPPORT DISADVANTAGED GROUPS

Admission requirements are an important policy lever for increasing equity in higher education. Admission policies to higher education can be decided nationally or at the institutional level, or in some cases jointly (Stead, 2015). Giving higher education institutions some leeway in deciding on admissions can be helpful to disadvantaged groups. When entry into higher education is selective, such as for example through centralized examinations, disadvantaged groups often fare less well. In Turkey, low income students find it difficult to compete on entrance exams with applicants from advantaged backgrounds who have more resources to spend on private tutoring.
and exam preparation (Caner and Okten, 2013). However, when admission policies are decided at the institutional level, individual circumstances can more easily be taken into account.

Some countries with deeply rooted social inequities, such as Brazil, India and the United States, have found it necessary to set policies which provide special access to underrepresented groups. This kind of affirmative action in access has given rise to a great deal of debate. The term ‘affirmative action’ describes policies aimed at socio-politically non-dominant groups, such as cultural minorities or women.

Affirmative action policies may include numerical quotas for members of disadvantaged groups, or other preferential treatment, such as bonuses on admission scores, need-based scholarships or outreach programmes. Brazil, a country with a centralized exam admissions system, passed a national law in 2012 that imposed quotas on the country’s 63 federal universities, which are among the most prestigious institutions in the country. Under the law, half of all university places were guaranteed to students from public secondary schools, or of African or indigenous descent. Universities’ admission policies were changed to reflect the ethnic profile of the state in which they were situated. Lower income students began to receive bonuses on entrance examinations, which helped boost their enrolments (McCowan, 2016). Initial programme reviews show that students that use the quotas come from family backgrounds with up to 50% less money than other students (Norões and McCowan, 2016).

India has one of the world’s oldest quota systems for admission to higher education, enshrined in the country’s constitution adopted in 1950. The social system in India is strongly shaped by the 2,500 year old system that divides the population into five hereditary and occupation-specific castes. The lowest, known as the dalits, comprises 16% of the population. Despite the abolition by law of untouchability and caste-based discrimination, members of this group continue to be impoverished and are the target of discrimination, oppression, violence and exclusion. In addition, 50 million Indians belong to tribal communities. They live on the margins of society and are often excluded from mainstream development processes.

The quota-based affirmative action programme in India is targeted at tribes, lower castes and other so-called ‘backward’ classes recognised in the list of scheduled castes (SC) and scheduled tribes (ST). Under the system, 22.5% of all places in educational institutions that have complete or partial government funding are reserved for SC and ST youth. The rule’s inclusion in the constitution means it cannot be easily changed, but in 2005, the policy was extended to cover private as well as public higher education institutions. An empirical review of the admissions policy in 225 Indian engineering colleges shows that targeted enrolments increased almost three times. Even so, the most disadvantaged castes still attend in smaller proportions than their population shares, which means that there is still room for improvement (Bagde et al., 2016).

Affirmative action policies remain a controversial issue in the countries where they are implemented. Key concerns include whether targeted students are academically prepared or instead mismatched to elite universities, and whether the programmes target the students that really need it the most or rather benefit privileged minorities who may have gone to college anyway. A comparison of a race-based policy in the United States and a class-based policy in Israel shows that each policy works to improve the target audience, but neither by themselves can generate broad diversity that cuts across both race and class. In order to do so, the affirmative action policy would need to include socioeconomic diversity from the design stage (Alon, 2015). The study also finds that minority students perform better at elite institutions than they would at less prestigious schools, rejecting the mismatch criticism.

SPECIALISED UNIVERSITIES CAN INCREASE PARTICIPATION

Another strategy that some governments use to address severe disadvantage among certain groups is to establish special universities designed for disadvantaged groups, such as women’s universities in South Asia (India and Pakistan) and universities for ethnic minorities (for instance in Australia, Mexico and New Zealand). These special universities help to create an environment that is culturally more familiar to underrepresented groups, who often control and manage the institutions themselves.

In Latin America, the Universidades Interculturales (UI) were designed to address the access problems of indigenous or Afro-descendant populations in countries such as Argentina, the Plurinational State of Bolivia, Brazil, Colombia, Ecuador, Mexico and Nicaragua. Mexico, for example, set up several such universities in 2004 in regions with a large indigenous population. UI are open to all students, but they are grounded in indigenous culture.
and they offer programmes based on indigenous culture or knowledge (Mato, 2009). In 2015, about 10,750 students enrolled in the eleven Mexican intercultural universities. Of these, indigenous women made almost 1.5 times the male students, showing that these campuses are able to provide access to students that typically do not enrol elsewhere (Cortina, 2016).

Higher education must be affordable as well as accessible

As demand for higher education places has risen, governments have responded by shifting some of the cost burden onto individuals. While enrolments and spending per student have increased, public expenditure per student has not kept pace (OECD, 2016).

Since the mid-1990s, countries have adopted one of two strategies to expand cost-sharing. The first is increasing tuition and fees, either for everyone or by establishing ‘dual-track’ enrolments at public universities, where some students pay fees while others are state subsidised. The second is encouraging the private sector to provide degree programmes.

These two strategies have different uses. Policies that permit increases in tuition, either overall or for a select group of students, allow public universities to compensate for reduced direct government allocations by asking households to cover part of the cost of their education. Policies that encourage private provision broaden the pool of options for student enrolment while allowing governments to focus their financial efforts on the public system. But either way, both strategies shift the cost of higher education from the government to the household. This pattern reflects a global trend towards reduced public expenditure and increased privatisation and cost-sharing in higher education (Yang and McCall, 2014).

As cost sharing has become more common, higher education affordability has become more important. But collating information on the direct costs of higher education is not a straightforward task. Tuition, registration and examination fees often differ by subject area and by institution, especially between public and private providers. Not much systematic information is available on indirect costs to government, such as tax benefits for parents whose children are students. Detailed national data on costs are more likely to exist where there is a government policy to provide financial assistance to make higher education participation more affordable, through, for example, grants, repayable loans and discounted accommodation, food or transport.

The affordability of higher education also depends on the relationship between costs and income – whether current, forgone or future. Household surveys can be used to compare higher education costs with average household income levels. For example, the total cost of higher education in Mexico is 1.75 times the level of the average national household income, while it is only half that in Canada and New Zealand (Usher and Medow, 2010). While this is a useful guide to help understand affordability, it does not show how and why many young people cannot afford higher education.

Comparing the financial burden on households with the financial assistance provided to households can help highlight differences between countries (Orr, 2016). Across 26 countries in Europe, households contributed an average of 15% of total expenditure for higher education institutions in 2011, and student aid made up 18% of public higher education expenditure (see Figure 3).

There was substantial variation between countries. Cyprus, Norway and the United Kingdom provided well over 40% of public tertiary education expenditure in the form of

**FIGURE 3:** There are diverse ways of making higher education affordable

Household expenditure as a share of total expenditure for higher education institutions and support to students enrolled in higher education as a percentage of public expenditure on higher education, selected countries, 2011

[Graph showing the share of households in total expenditure for tertiary education institutions and support to students as a percentage of public tertiary education expenditure in selected countries.]
student aid. In Norway, there are almost no fees and aid was used to compensate for differences in students’ ability to afford living costs during their studies. In Cyprus and the United Kingdom, aid was used to offset the impact of high tertiary education fees (European Commission/EACEA/Eurydice, 2015).

National education accounts for 2013 show that the share of households in total higher education expenditure was even higher in non-European high income countries: for example, it was 40% in Australia, 52% in Japan, 42% in the Republic of Korea and 46% in the United States. In Chile, where reforms were recently instituted in response to strong political protests, it was 55% (OECD, 2016).

ONE SIZE FITS ALL PROGRAMMES DO NOT WORK

One approach to affordability is to make higher education free for all. In the face of rising costs, ‘free’ sounds to many students and families like exactly the right price point. For that reason, free tuition is a hot topic in Germany, South Africa and the United States. However, a free-for-all tuition policy that does not go along with additional support for disadvantaged groups can exclude poor students and subsidise the rich.

In the Philippines, a law was passed in 2016 abolishing tuition fees for 1.6 million students enrolled in 112 state universities and colleges, about 40% of the total number of students in the country (CHED, 2017). The new free-for-all law does not apply to any of the 2.45 million students enrolled in private institutions or in other public institutions, such as local or special colleges. Neither does the policy cover costs associated with attending classes, such as books, transportation and living expenses.

The policy seems like a move towards affordability, but in fact, students who enrol at a state college are already more likely to be able to afford higher education, as compared to their peers in private institutions (Orbeta and Paqueo, 2017). In other words, the subsidies are targeting students who can already better afford tuition. These untargeted subsidies leave behind private tuition fees, which can be up to three times higher than those of public institutions (ADB, 2012). Public loans and grant programmes exist to help with private tuition, but funding programmes determine student eligibility based on a combination of household income and academic performance, which excludes the low ability students that enrol in private institutions. In 2015, less than 4% of students enrolled at private institutions received awards (CHED, 2017).

The Philippines proposal reflects the standing criticism that free-for-all tuition at elite public universities disadvantages poor students. In Argentina, public universities have free tuition, but almost 90% of students at these institutions have per capita family income that is higher than the median, and almost 50% attended tuition-financed private high schools (Rozada and Menendez, 2002). So, to increase equity, any effort to keep tuition fees low at public universities has to happen in conjunction with pathways for admission for talented students from disadvantaged backgrounds and financial aid programmes for all.

LOW TUITION FEES SHOULD BE COMBINED WITH FINANCIAL AID PROGRAMMES

Financial aid programmes make college and university more affordable through a combination of grants, loans and tax benefits. Such programmes have become even more essential, because while even where the gap in access may be closing, the gap in access to good quality institutions is more and more related to students’ ability to pay.

Studies from China, India and the Russian Federation show that as these countries’ higher education systems expanded, elite research universities received more public spending and often charged higher tuition and fees (Carnoy et al., 2014). Meanwhile, comprehensive or non-elite colleges and technical institutes received less public funding and charged their students lower tuition fees. Evidence from Chile shows that a combination of need-based grants and loans not only helps increase equitable access for low income students but also improves persistence through to graduation (Santelices et al., 2016).

Low tuition fees, need-based scholarships and income contingent loans work together to fix the quality-affordability gap. The International Comparative Higher Education and Finance Project (ICHEFP) tracks student financial assistance and fee policies. Countries combine different approaches to tuition – whether free, dual-track, deferred or upfront – with grants and loans to provide a full financial aid package (see Figure 4). Means-tested aid targets assistance based on student or household income or on other attributes such as ethnicity, gender or home region. Loans and grants may cover tuition and the cost of attendance, providing money for books, housing and
They may be selectively distributed according to financial need or academic merit, or targeted to a disadvantaged population or a highly needed subject, such as technology or health care.

Poland is an example of a country that uses a combination of low-tuition fees, scholarships and loans to offer broad access to higher education. In 2011, Poland broadened the system of scholarships by changing the ratio between merit grants and income-based grants in favour of income-based grants and raising by 30% the income threshold for eligibility to get a grant to cover other costs of attendance, like housing and transportation (OECD, 2015).

China charges upfront tuition but has recently improved its financial aid policy, which serves over 27 million students. The net cost of attendance for low income Chinese students is 187% of per capita income and low income students in less selective institutions have higher unmet needs than wealthier students in more elite universities (Yang and Cheng, 2013). The reforms addressed this equity gap by expanding the pool of students eligible for government assistance, extending the loan repayment time to 20 years and adding repayment assistance for low income students (ICHEFP, 2017).

Loan repayment assistance for students with low income or low lifetime earnings is an important mechanism for increasing affordable options. Income contingent loans limit the repayment amount to a percentage of the individual's discretionary income (for example, between 8% and 15% of monthly income) (Baum and Schwartz, 2005; Chapman et al., 2010). These flexible repayment plans can be adjusted to match the student's household income across the life of the loan.
Thailand’s experience demonstrates why this sort of flexibility is needed. Thailand’s higher education institutions charge steep upfront tuition fees and the government offers a flat repayment loan to help with costs. The repayment burdens for median earning graduates are low: about 3% for males and 5% for females. This falls well below the target of 8–15%. By comparison, the poorest students use a much larger percentage of their income to repay their loans, around 9% for males and 14% for females (Chapman et al., 2010). In 2006, the Thai higher education commission tried to introduce an income contingent loan to resolve these differences, but the programme was cancelled after one year because it was expensive and difficult to implement.

Targeting low income populations is critical to developing a sound financial aid policy, but means testing can be difficult in countries with less reliable measures of household finances, as is the case in many low income countries. Most sub-Saharan African governments do not have access to complete data on household finances, so some countries use proxies to gauge need, such as the level of education of the parents, the characteristics of the home or the family’s possessions (ICHEFP, 2003). Another difficulty is the lack of an effective collection mechanism, since income contingent loans usually require a comprehensive income tax system. Loan boards and education trust funds in Ghana, Kenya, South Africa and the United Republic of Tanzania have been able to address some of these administrative challenges by instructing employers to deduct repayment from wages (Pillay, 2013).

**Recommendations**

Equitable and affordable higher education is essential to achieving the SDGs. Demand for higher education will continue to rise and, as it does, governments must respond by ensuring that all groups can access affordable, quality programmes. To help ensure both good policy and effective implementation, we propose six key recommendations:

- **Know your target for equity policies.** Review equity policies periodically to make sure that the groups that most need help are getting it. Take advantage of household surveys and other monitoring tools to keep track of different groups.
- **Put it in the law.** Ensure equity and affordability across diverse higher education systems by guaranteeing principles of access within regulatory frameworks.
- **Set up steering and monitoring agencies.** Guarantee student protection by establishing national agencies to develop and follow up on equal opportunities policies, equity and affordability in higher education. Quality assurance bodies can play a role in the monitoring of equity policies.
- **Level the playing field.** Use a combination of admissions criteria to ensure that all students have a fair chance at getting into the best universities, regardless of their backgrounds. Develop effective affirmative action policies that put equity front and centre in the admissions process.
- **Combine tuition fees with means-tested grants and loans.** Concentrate public financial aid on disadvantaged student groups. Establish an agency to coordinate student financial aid disbursement and effective collection mechanisms.
- **Limit student repayments.** Combine low tuition and fees with income-based loans to cap student repayment burdens at less than 15% of monthly income.